## Release notes for ENDF/B Development e-067\_Ho\_000 evaluation



October 13, 2016

## • fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-067\_Ho\_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

2. FIXME: Generic fudge unimplemented message reaction label 1: e- + Ho + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Ho [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

## • fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: e- + Ho [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Ho + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Ho [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Ho1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 55699. eV!

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9360.200000000001 eV!

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8928.700000000001 eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Ho2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8061.7 eV!
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- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Ho3s1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2102.5 eV!
- 9. Calculated and tabulated thresholds don't agree reaction label 8: e- + e- + Ho3p1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1910.4 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Ho3p3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1728.5 eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: e- + e- + Ho3d3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1395.2 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1355.3 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12: e- + e- + Ho4s1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 420.35 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: e- + e- + Ho4p1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 343.05 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 302.2 eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 15: e- + e- + Ho4d3/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 173.63 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 166.23 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10.8 eV!

- 19. Calculated and tabulated thresholds don't agree reaction label 18: e- + e- + Ho4f7/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9.73 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 55.19 eV!
- 21. Calculated and tabulated thresholds don't agree reaction label 20: e- + e- + Ho5p1/2 / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 33.89 eV!
- 22. Calculated and tabulated thresholds don't agree reaction label 21:  $e^- + e^- + Ho5p3/2$  / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 28.58 eV!
- 23. Calculated and tabulated thresholds don't agree reaction label 22:  $e^- + e^- + Ho6s1/2$  / Cross section: (Error # 0): Threshold mismatch
  - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.42 eV!
- xsectplotter Warnings:
  - 1. Mislabled emitted particle Error: ZAP messed up

stderr while processing crossSection

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0  $\dots$  [4 more lines]